



MINISTRY
OF AGRICULTURE
and RURAL DEVELOPMENT

of the SLOVAK REPUBLIC

FORESTS IN SLOVAKIA

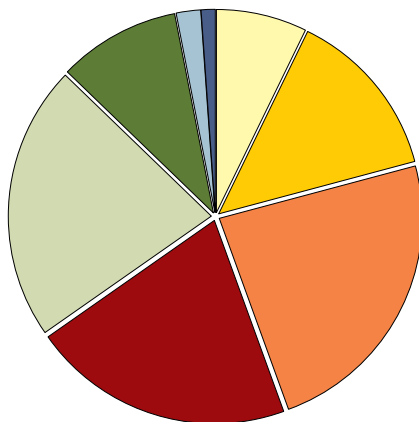
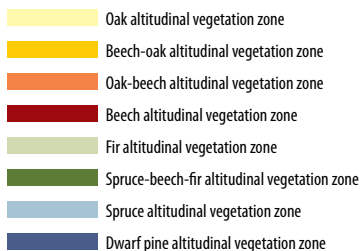


2012

Statement of 31th of December 2011

NATURAL CONDITIONS IN THE FORESTS IN SLOVAKIA

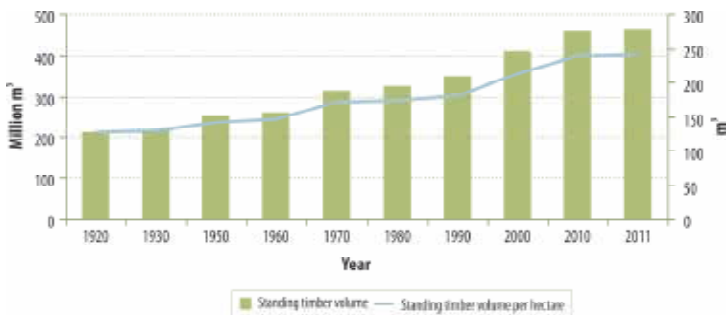
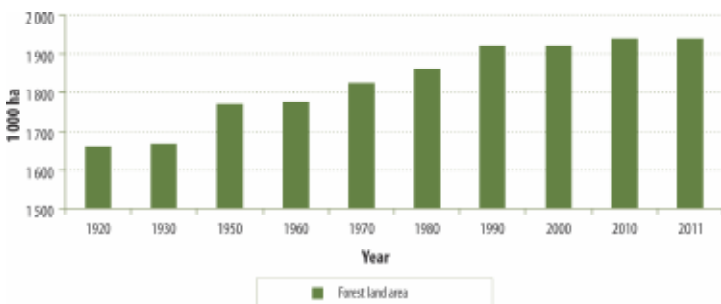
Area									Together
ha	138 974	265 238	458 898	404 133	425 792	185 149	40 611	21 312	1 940 108
%	7.2	13.7	23.7	20.8	21.9	9.5	2.1	1.1	100



DEVELOPMENT OF BASIC DATA ON FORESTS IN SLOVAKIA

Year	1920	1930	1950	1960	1970	1980	1990	2000	2010	2011
ths. ha	1659.0	1668.0	1771.2	1775.6	1826.6	1861.6	1921.7	1921.4	1938.9	1940.1
%	33.9	34.1	36.1	36.2	37.3	38.0	39.2	39.2	41.0	41.0
ha	0.55	0.50	0.51	0.45	0.40	0.37	0.36	0.36	0.36	0.36
mil. m ³	213.3	217.9	251.2	258.8	313.3	324.0	348.5	410.0	462.0	466.1
m ³ /ha	129	131	142	146	171	174	181	215	239	241
m ³	71	66	73	65	69	65	66	76	85	86

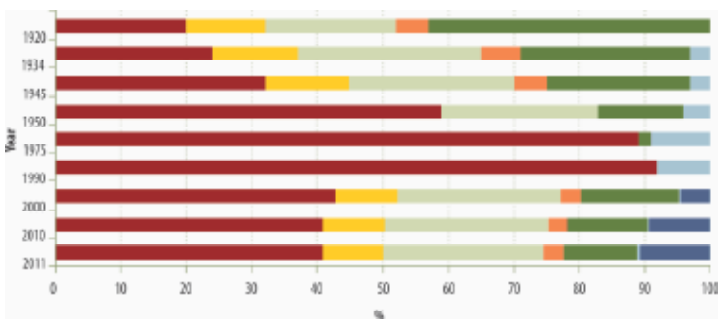
- Forest land area
- Standing timber volume
- Percentage of forest land
- Standing timber volume per hectare
- Forest land area per capita
- Standing timber volume per capita



DEVELOPMENT OF FORESTS USE

Year	1920	1934	1945	1950	1975	1990	2000	2010	2011
	%								
State	20	24	32	59	89	92	42.7	40.9	40.8
Municipal	12	13	13	0	0	0	9.6	9.4	9.4
Shared	20	28	25	24	0	0	24.8	25.0	24.5
Church	5	6	5	0	0	0	3.3	2.9	2.9
Private	43	26	22	13	2	0	14.9	12.3	11.3
Agriculture co-operatives	0	3	3	4	9	8	0.2	0.3	0.3
Unidentified users	0	0	0	0	0	0	4.5	9.2	10.8

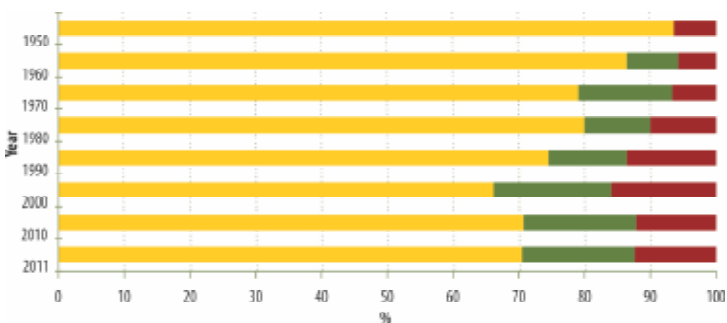
- State
- Municipal
- Shared
- Church
- Private
- Agriculture co-operatives
- Unidentified users



DEVELOPMENT OF FOREST CATEGORIES IN SLOVAKIA ACCORDING TO DOMINANT FUNCTIONS

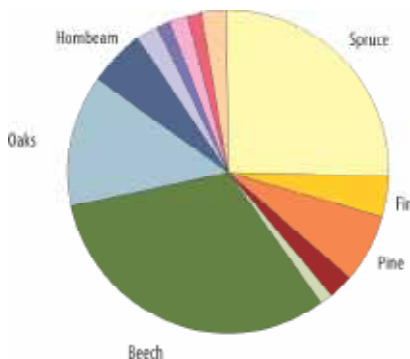
Year	1950	1960	1970	1980	1990	2000	2010	2011
	%							
Commercial forests	93.5	86.4	79.1	80.0	74.5	66.3	70.7	70.4
Special purpose forests	0.0	7.9	14.3	10.1	12.0	17.7	17.1	17.1
Protective forests	6.5	5.7	6.6	9.9	13.5	16.0	12.2	12.5

- Commercial forests
- Special purpose forests
- Protective forests



ACTUAL TREE COMPOSITION IN THE FORESTS IN SLOVAKIA

Tree species		%
	Spruce	25.1
	Fir	4.0
	Pine	6.9
	Larch	2.4
	Dwarf pine	1.1
	Coniferous	39.5

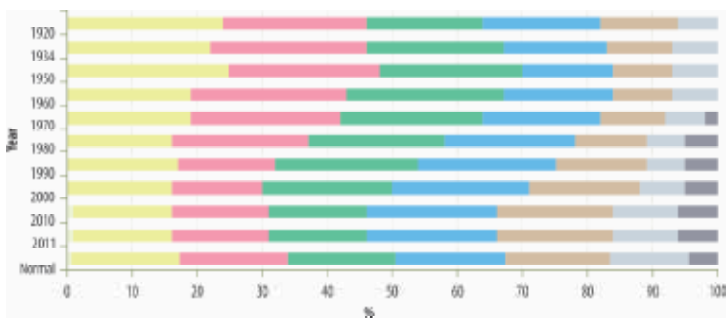


Tree species		%
	Beech	32.0
	Oaks	13.2
	Hornbeam	5.8
	Maple	2.2
	Ash	1.5
	Robinia	1.7
	Birch	1.5
	Other	2.6
	Broadleaved	60.5

STRUCTURE OF FORESTS IN SLOVAKIA ACCORDING TO AGE CLASSES

Year	1920	1934	1950	1960	1970	1980	1990	2000	2010	2011	Normal
	%										
0	0	0	0	0	0	0	0	0	1	1	0.8
1	24	22	25	19	19	16	17	16	15	15	16.6
2	22	24	23	24	23	21	15	14	15	15	16.6
3	18	21	22	24	22	21	22	20	15	15	16.6
4	18	16	14	17	18	20	21	21	20	20	16.6
5	12	10	9	9	10	11	14	17	18	18	16.3
6	6	7	7	7	6	6	6	7	10	10	12.1
7	0	0	0	0	2	5	5	5	6	6	4.4

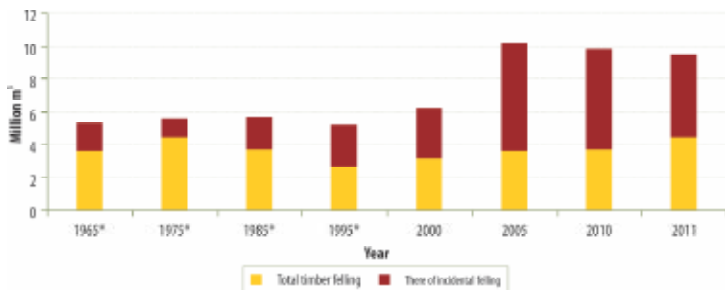
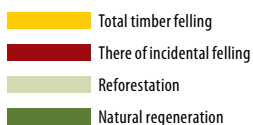
- 0th age class (unstocked area)
- 1st age class (1 – 20 years)
- 2nd age class (21 – 40 years)
- 3rd age class (41 – 60 years)
- 4th age class (61 – 80 years)
- 5th age class (81 – 100 years)
- 6th age class (101 – 120 years)
- 7th age class (120 years and more)



DEVELOPMENT OF INDICATORS OF MANAGEMENT IN THE FORESTS OF SLOVAKIA

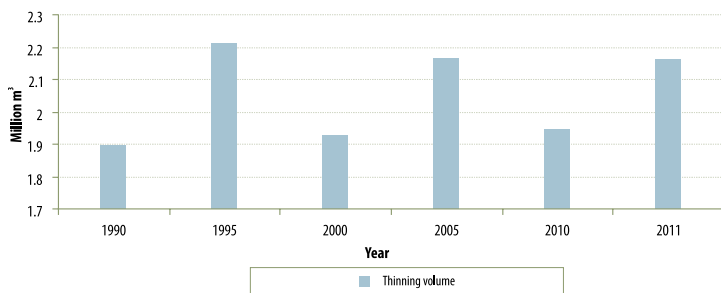
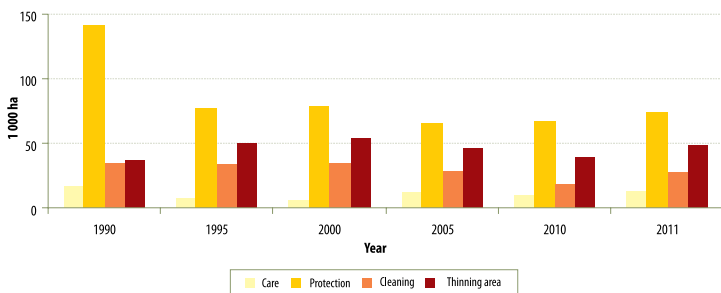
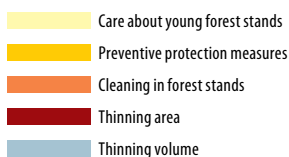
Year	1965*	1975*	1985*	1995*	2000	2005	2010	2011
mil. m ³	5.27	5.54	5.64	5.25	6.22	10.19	9.86	9.47
	1.67	1.12	1.90	2.65	3.02	6.53	6.16	4.99
ha	28 252	22 951	22 391	12 609	12 923	8 922	8 520	10 923
	0	0	0	1 407	2 134	4 582	5 460	7 132

*Data represent decennial average values.



DEVELOPMENT OF INDICATORS OF MANAGEMENT IN THE FORESTS OF SLOVAKIA

Year	1990	1995	2000	2005	2010	2011
1 000 ha	16.97	7.66	5.81	11.38	9.60	12.66
	141.92	77.57	78.32	65.72	66.58	74.05
	34.14	32.89	34.94	29.08	18.14	27.12
	37.14	50.24	53.94	46.07	39.59	48.99
mil. m ³	1.90	2.21	1.93	2.16	1.95	2.16



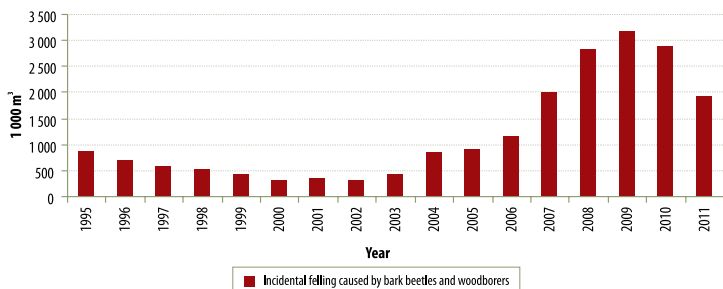
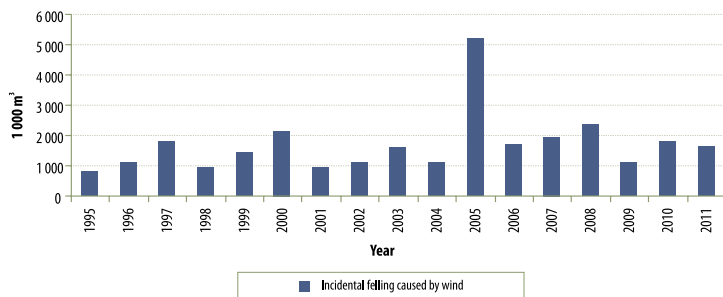
DEVELOPMENT OF FOREST DAMAGE IN SLOVAKIA

Proportion of incidental felling in the total annual felling

Year	1995	1996	1997	1998	1999	2000	2001	2002
	%							
	56.1	58.9	57.1	41.7	45.5	48.6	39.5	34.5

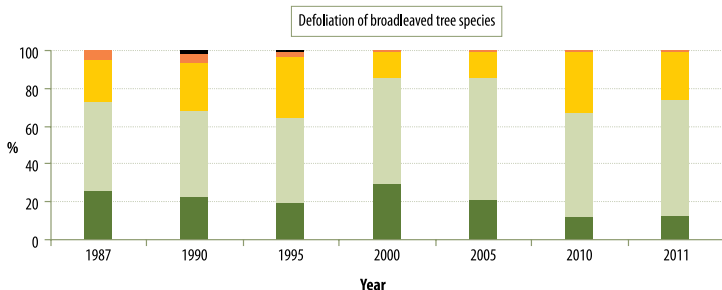
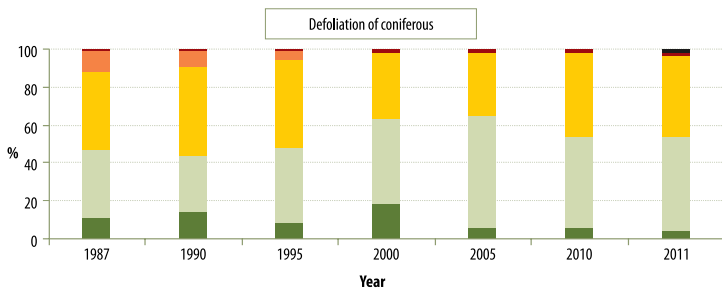
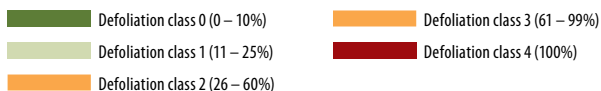
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
	%								
	41.3	40.1	64.0	51.0	56.2	64.6	60.4	62.5	52.7

■ Proportion of incidental felling in the total annual felling



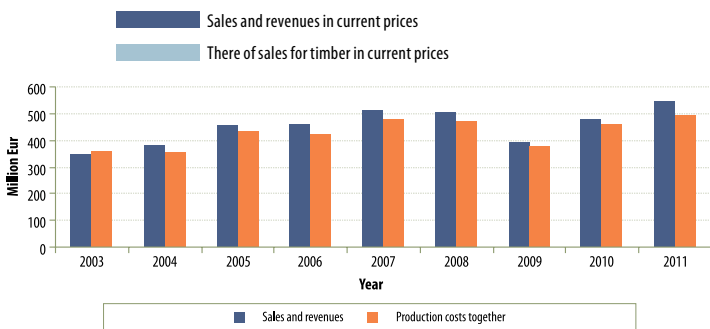
DEVELOPMENT OF HEALTH CONDITION OF THE FOREST IN SLOVAKIA

Year		1987	1990	1995	2000	2005	2010	2011
		%						
Defoliation class 0 (0 – 10%)	Coniferous	11	14	8	18	6	6	4
	Broadleaved	26	23	19	29	21	12	13
Defoliation class 1 (11 – 25%)	Coniferous	36	30	40	44	59	48	49
	Broadleaved	47	45	46	57	65	55	61
Defoliation class 2 (26 – 60%)	Coniferous	41	47	46	36	33	44	44
	Broadleaved	22	25	32	13	13	32	26
Defoliation class 3 (61 – 99%)	Coniferous	11	8	5	2	2	2	1
	Broadleaved	5	5	2	1	1	1	0
Defoliation class 4 (100%)	Coniferous	1	1	1	0	0	0	2
	Broadleaved	0	2	1	0	0	0	0

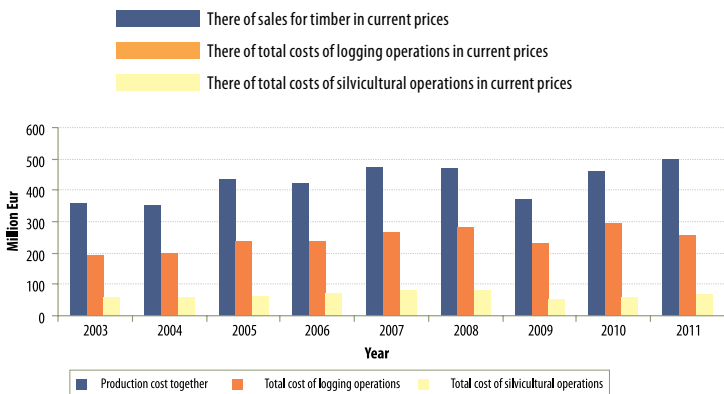


DEVELOPMENT OF ECONOMIC INDICATORS IN FORESTRY OF SLOVAKIA

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Million Eur								
	350	381	457	459	511	502	390	479	544
	277	314	377	364	405	405	310	377	433

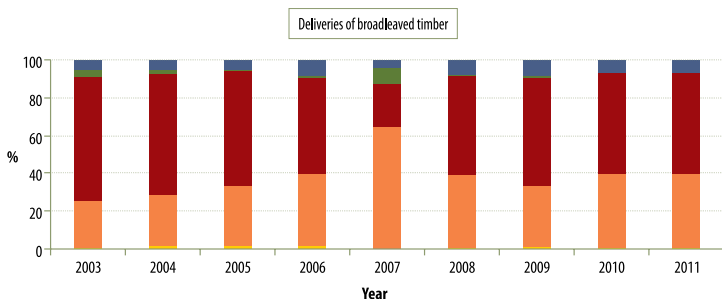
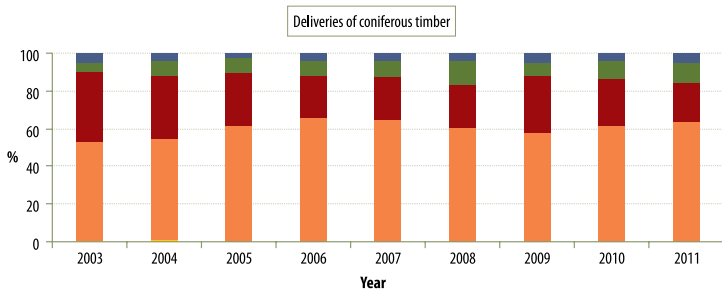
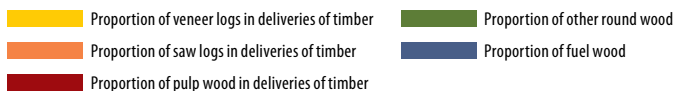


Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Million Eur								
	359	353	434	420	476	471	373	461	496
	192	197	238	235	266	279	231	293	256
	58	57	63	73	82	83	52	58	70



DEVELOPMENT OF ECONOMIC INDICATORS IN FORESTRY OF SLOVAKIA

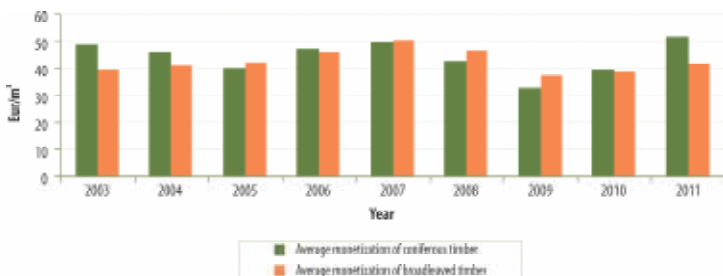
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
	%								
Coniferous	0.63	0.46	0.11	0.20	0.21	0.12	0.14	0.04	0.04
	52.29	54.47	61.26	65.51	64.27	60.10	57.72	61.63	63.75
	37.3	33.13	28.35	22.8	23.24	23.29	30.54	24.69	19.99
	5.01	8.1	7.9	7.06	8.10	11.97	6.52	9.54	10.88
	4.77	3.84	2.38	4.43	4.18	4.52	5.08	4.10	5.34
Broadleaved	1.08	1.47	1.43	1.30	0.24	0.90	0.50	0.61	0.61
	23.99	26.68	31.88	38.29	64.27	38.57	33.04	39.10	38.90
	65.7	64.30	60.58	51.01	23.20	52.43	57.39	53.28	53.51
	4.43	2.9	1.27	1.35	8.08	0.47	0.82	0.32	0.26
	4.8	4.65	4.84	8.05	4.21	7.63	8.25	6.69	6.72



DEVELOPMENT OF ECONOMIC INDICATORS IN FORESTRY OF SLOVAKIA

Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Eur/m ³								
	48.73	45.84	39.77	47.30	50.26	43.05	32.96	39.64	51.46
	39.43	40.89	42.26	45.94	50.32	46.47	37.14	38.93	41.72
	44.31	43.65	40.60	46.77	50.29	44.18	34.26	39.40	47.46

- Average monetization of coniferous timber in current prices
- Average monetization of broadleaved timber in current prices
- Average timber monetization in current prices



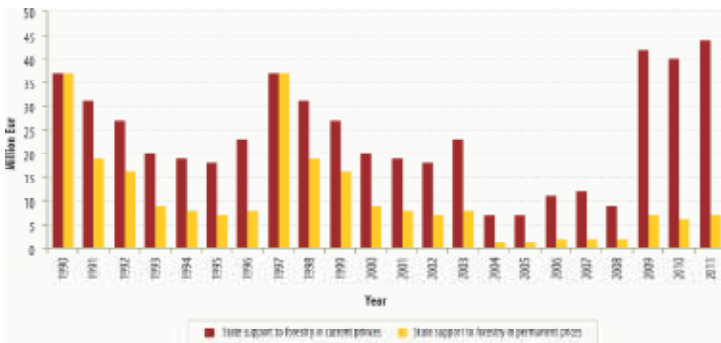
DEVELOPMENT OF ECONOMIC INDICATORS IN FORESTRY OF SLOVAKIA

Year	1990	1991	1992	1993	1994	1995	1996
	million Eur						
	37	31	27	20	19	18	23
	37	19	16	9	8	7	8

Year	1997	1998	1999	2000	2001	2002	2003
	million Eur						
	17	23	16	19	20	17	12
	6	7	4	5	5	4	2

Year	2004	2005	2006	2007	2008	2009	2010	2011
	million Eur							
	7	7	11	12	9	42	40	44
	1	1	2	2	2	7	6	7

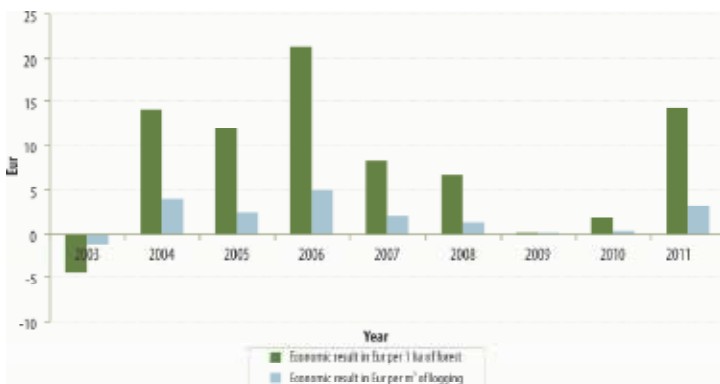
- State support to forestry in current prices
- State support to forestry in permanent prices



DEVELOPMENT OF ECONOMIC INDICATORS IN FORESTRY OF SLOVAKIA

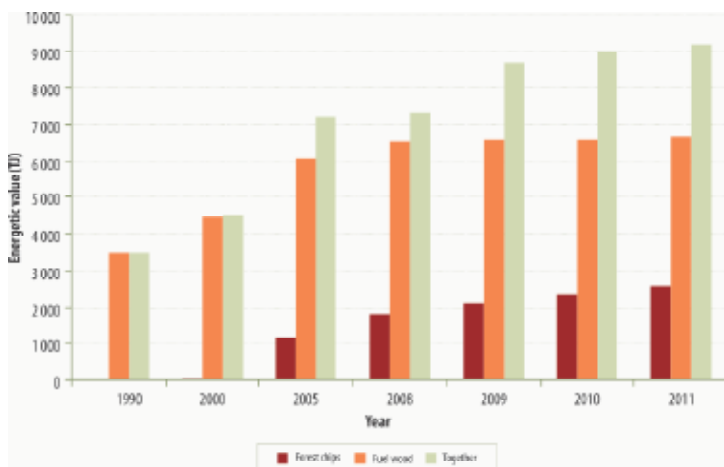
Year	2003	2004	2005	2006	2007	2008	2009	2010	2011
	Eur								
	-4.51	14.11	11.88	21.38	8.33	6.64	0.12	1.91	14.21
	-1.36	3.88	2.32	5.05	1.99	1.36	0.02	0.36	3.11

- Economic result of the subjects in the forestry of SR in Eur per 1 ha of forest
- Economic result of the subjects in the forestry of SR in Eur per 1 m³ of logging



OVERVIEW OF DEVELOPMENTS IN THE AMOUNT OF BIOMASS FOR ENERGY USE

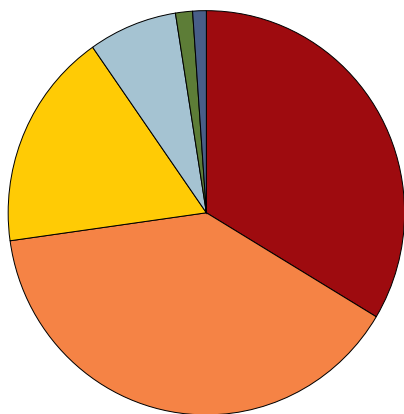
Year	Forest chips		Fuel wood and other		Together	
	1 000 t	TJ	1 000 t	TJ	1 000 t	TJ
1990	2	19	368	3 496	370	3 515
2000	5	48	471	4 475	476	4 523
2005	120	1 140	640	6 080	760	7 220
2008	190	1 805	690	6 555	880	8 360
2009	220	2 090	695	6 602	915	8 692
2010	250	2 375	695	6 602	945	8 977
2011	270	2 565	700	6 650	970	9 215



NUMBER AND AREA OF SITES UNDER PROTECTION IN TERMS OF FULFILLMENT OF INTERNATIONAL OBLIGATIONS OF SR

Territory	Number	Area (ha)*
Biosphere Reserves	4	247 248
Ramsar's localities	14	42 458
Natural Heritage Areas UNESCO	2	38 363
Natura 2000 – Special Protection Bird Areas	41	1 310 943
Natura 2000 – Areas of European Importance	382	584 353
Sites reported to Carpathian Convention (national protected areas over 100 ha)	180	1 126 560
Total	623	3 349 925

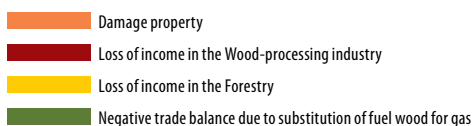
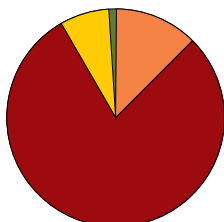
*Area in ha without mutual overlapping of the areas.



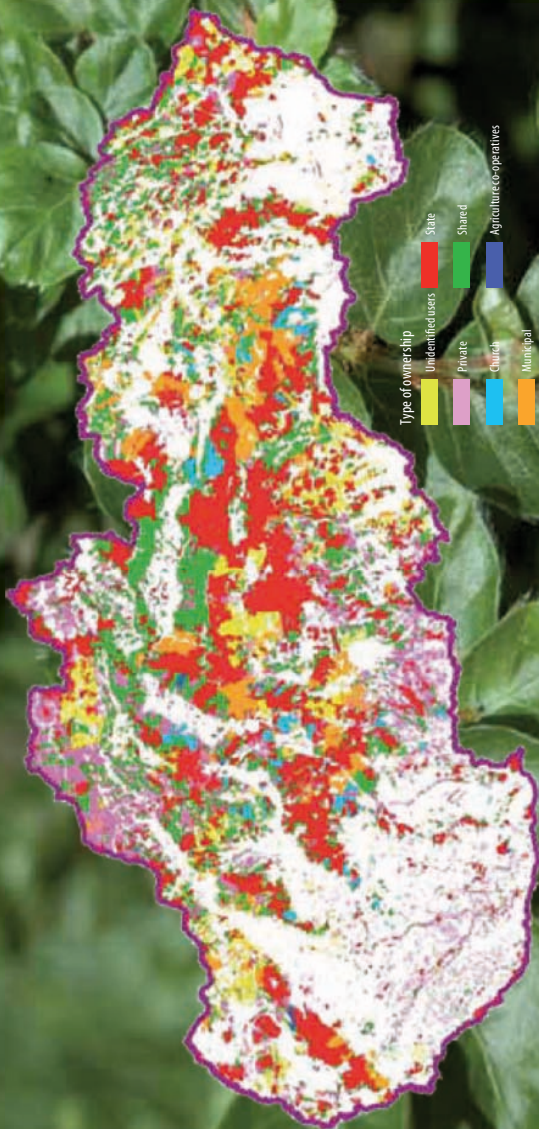
- Sites reported to Carpathian Convention (national protected areas over 100 ha)
- Natura 2000 – Special Protection Bird Areas
- Natura 2000 – Areas of European Importance
- Biosphere Reserves
- Natural Heritage Areas UNESCO
- Natural Heritage Areas UNESCO

SELECTED FINANCIAL AND SOCIO-ECONOMIC IMPACTS OF NATURE CONSERVATION

Indicators of the impact		mil. Eur
The overall financial impacts – material damage		26.983
of which	loss of the yield from wood	1.648
	reducing the yield from wood	0.030
	increased costs of forest management	16.061
	damage in the sites of Community importance and Protected Bird Areas beyond national network of protected areas	1.710
	reduce the overall value of forests	2.979
	increase the overall value of forests	2.379
	increased costs of protective measures in buffer zones of strict protected areas	2.176
Paid property damage		2.134
of which	financial contributions paid pursuant to § 61 of the Law on the Protection of Nature and Landscape	1.431
	payments under RDP 2007–2013	0.703
Hitherto unpaid property damage		24.849
The overall socio-economic impacts		169.267
Loss of income in the wood – processing industry		167.806
of which	employee and employer contributions	5.173
	income tax for natural persons and legal entities	2.255
	value added tax (VAT)	7.486
	net income of employees (excluding service providers)	8.786
	economic result	8.286
	other costs	119.536
	cost of wood = Loss of income in Forestry	
of which	employee and employer contributions	2.197
	income tax for natural persons and legal entities	0.746
	value added tax (VAT)	1.419
	net income (including supply sector)	7.215
	economic result	1.177
	other costs	3.530
Negative trade balance due to substitution of fuel wood for gas		1.461



FOREST LAND OWNERSHIP IN SLOVAKIA



Published by: Ministry of Agriculture and Rural Development of the Slovak Republic, Bratislava

Editor: Ing. Marián Radocha, CSc.

Foto cover: Ľuboš Frič, Ing. Vladimír Šebeň, PhD.

Designed by: Ľubica Pilná, Ľuboš Frič

Copyright: © Ministry of Agriculture and Rural Development of the Slovak Republic, Bratislava 2012